

N THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (Currently Amended) A system, comprising:
a three-dimensional (3D) volumetric display output configuration having a display content; and
an input configuration coupled to the volumetric display output configuration and comprising a passive sensor allowing a user to affect the display content through the passive sensor by mapping the affect to a 3D position of a cursor.
2. (Withdrawn) A system as recited in claim 1, wherein the sensor comprises a motion tracking camera.
3. (Withdrawn) A system as recited in claim 1, wherein the sensor comprises a glove and glove tracking system.
4. (Original) A system as recited in claim 1, wherein the sensor comprises a touch sensitive surface.
5. (Original) A system as recited in claim 1, wherein the sensor comprises magnetic filed tracking system.
6. (Original) A system as recited in claim 1, wherein the output configuration comprises one of a dome, a cylinder, a cubical box and an arbitrary shape.
7. (Original) A system as recited in claim 1, wherein the input configuration comprises one of a 3D volumetric input space mapped to the 3D volumetric display, a planer 2D input space mapped to the 3D volumetric display, a planar 2D input space mapped to a planar 2D space within the 3D volumetric display, and a non-planar 2D input space mapped to the 3D

volumetric display.

8. (Original) A system as recited in claim 7, wherein the user produces inputs comprising one or directly with a hand, with a surface touching device and with an intermediary device.

9. (Original) A system as recited in claim 7, wherein the input configuration further comprises one of an input volume adjacent to the display, an input volume surrounding the display, a digitizing surface covering a surface of the display, a digitizing surface offset from the surface of the display, and an intermediary device used with the display.

10. (Original) A system as recited in claim 9, wherein the intermediary device comprises one of a stylus, a surface fitting mouse, a park able mouse, a multi-dimensional mouse, a movable input device positioned on a bottom periphery of the display and a set of identical input devices positioned spaced around a bottom periphery of the display.

11. (Original) A system as recited in claim 1, wherein the input configuration comprises a non-planar 2D input space mapped to the 3D volumetric display.

12. (Withdrawn) A system as recited in claim 1, wherein the input configuration comprises a tracking system tracking a user.

13. (Original) A system as recited in claim 1, wherein the input configuration is non-spatial.

14. (Withdrawn) A system as recited in claim 1, wherein the input configuration comprises a voice recognition system allowing the use to affect the display content using voice commands.

15. (Original) A system as recited in claim 1, wherein the input configuration and output configuration define a spatial correspondence between an input space and an output space.

16. (Original) A system as recited in claim 15, wherein the spatial correspondences

comprises one of 3D to 3D, 2D planar to 3D, 2D planar to 2D planar and non-planar 2D to 3D.

17. (Original) A system as recited in claim 14, where the input configuration, output configuration and the user define a dynamically updatable spatial correspondence.

18. (Withdrawn) A system, comprising:
a dome shaped three-dimensional (3D) volumetric display having an enclosure surface;
an input configuration comprising a digitizing system passively digitizing actions by the user; and
a computer coupled between the display and the digitizing system, producing 3D content displayed in the display, mapping the non-planar position coordinates to a 3D coordinate position in the display by offsetting along the vector by an offset distance from the tip and affecting the content at the 3D coordinate position.

19. (Currently Amended) A method, comprising:
interacting, by a user, with a three-dimensional (3D) volumetric display via a passive detecting system; and
affecting the 3D content of the display responsive to the interaction by mapping the interacting to a 3D position of a cursor.

20. (Withdrawn) A method as recited in claim 19, wherein the display comprises a camera and said interacting comprises tracking movements by the user with the camera.

21. (Currently Amended) A system, comprising:
a three-dimensional (3D) volumetric display output configuration having a display content; and
an input configuration coupled to the volumetric display output configuration and allowing a user to affect the display content by mapping the affect to a 3D position of a cursor, said input configuration comprising a touch sensitive surface overlaid on said display.

22. (Withdrawn) A system, comprising:
a three-dimensional (3D) volumetric display output configuration having a display content; and
an input configuration coupled to the volumetric display output configuration and allowing

a user to affect the display content, said input configuration comprising a light ray projection system projection a ray into on said display.

23. (Currently Amended) A system, comprising:

a three-dimensional (3D) volumetric display output configuration having a display content; and

an input configuration coupled to the volumetric display output configuration and allowing a user to affect the display content by mapping the affect to a 3D position of a cursor, said input configuration comprising a surface motion system detecting motion on a surface of said display.

24. (Withdrawn) A system, comprising:

a three-dimensional (3D) volumetric display output configuration having a display content; and

an input configuration coupled to the volumetric display output configuration and allowing a user to affect the display content, said input configuration comprising a camera sensing a state of an input object.

25. (Currently Amended) A system, comprising:

a three-dimensional (3D) volumetric display output configuration having a display content; and

an input configuration coupled to the volumetric display output configuration and allowing a user to affect the display content by mapping the affect to a 3D position of a cursor, said input configuration comprising an input device moving in three dimensions on a surface of said display.